

P a t e n t c l a i m s

- 5 1. An apparatus for heat treatment of tissue specimens, comprising a pressure cooker (1) for cooking of the tissue specimens, a temperature sensor (5) and a pressure sensor (6) connected to the pressure cooker, and a control unit (15) for time-controlled heat treatment of the tissue specimens in the pressure cooker (1), **characterised in** that the control unit (15) is arranged to control a programmed step-by-step heating course, 10 with a programmed time duration on each temperature step, from a chosen start temperature up to a chosen maximum temperature.
- 15 2. An apparatus according to claim 1, **characterised in** that it comprises a vent valve (8) coupled to the pressure cooker (1), and that the control unit (15) also is arranged to control a programmed step-by-step cooling course, from the chosen maximum temperature down to a chosen final temperature.
- 20 3. An apparatus according to claim 1 or 2, **characterised in** that the control unit (15) comprises a processor unit which controls the relevant temperature courses by means of a data program.
- 25 4. An apparatus according to one of the claims 1-3, **characterised in** that it comprises a vacuum pump (11) which is connected to the pressure cooker (1) via an electric valve (10), to reduce the pressure in the pressure cooker to a desired value.
- 30 5. An apparatus according to one of the claims 1-4, **characterised in** that the pressure cooker (1) and the control unit (15) are integrated in a treatment apparatus (20) which also is arranged to carry out dewaxing of tissue specimens on microscope slides 25 before the heat treatment in the pressure cooker.
- 35 6. An apparatus according to claim 5, **characterised in** that the treatment apparatus (20) comprises a hot plate (23) for heating of the pressure cooker (1) with the tissue specimens, a revolving unit (25) arranged under the hot plate and comprising a rotatable plate (26) supporting an annular arrangement of vessels (28) for receiving baskets (29) with microscope slides and a loading magazine (30) for baskets, a driving motor for controlled step-by-step rotation of the revolving unit (25), and a hoist device (40) for lifting and lowering of the baskets which are to be transferred from the loading magazine (30) to the individual vessels (28) and from vessel to vessel.
- 35 7. An apparatus according to claim 6, **characterised in** that it includes a heating stove (55) for heating of baskets (29) in the loading magazine (30).